

PATENT COOPERATION TREATY

PCT

REC'D 17 JAN 2005

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

Applicant's or agent's file reference sps.2619.oct.ac.l	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/05337	International filing date (day/month/year) 08.12.2003	Priority date (day/month/year) 09.12.2002
International Patent Classification (IPC) or both national classification and IPC E21B37/00		
Applicant SPECIALISED PETROLEUM SERVICES GROUP LIMITED et al		



1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- | | | |
|------|-------------------------------------|--|
| I | <input checked="" type="checkbox"/> | Basis of the opinion |
| II | <input type="checkbox"/> | Priority |
| III | <input checked="" type="checkbox"/> | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| IV | <input type="checkbox"/> | Lack of unity of invention |
| V | <input checked="" type="checkbox"/> | Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI | <input type="checkbox"/> | Certain documents cited |
| VII | <input type="checkbox"/> | Certain defects in the international application |
| VIII | <input type="checkbox"/> | Certain observations on the international application |

Date of submission of the demand 02.07.2004	Date of completion of this report 14.01.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Stroemmen, H. Telephone No. +49 89 2399-7345 <div style="text-align: right;">  </div>

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/GB 03/05337**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-13 as originally filed

Claims, Numbers

1-23 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☐ claims Nos.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 19 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	6-9,17-18
	No: Claims	1-5,10-16,20-23,
Inventive step (IS)	Yes: Claims	6-7
	No: Claims	1-5,8-23,
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

2. Citations and explanations

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Reference is made to the following documents:

D1: US 2002/162655 A1

D2: US-B1-6 431 273

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

- III-1 Claim 19 does not specify explicitly and univocally any technical feature, and can therefore not be examined. Furthermore, said claim is presented in a way that leaves the reader in doubt as to its alternative dependencies. See also the PCT Guidelines PCT/GL/ISPE/1, 5.18.

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- V-1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A downhole tool for use in a cased or lined well bore (fig. 3a, 4a), the tool comprising a body (66) connectable in a work string, a fluid flow path (72) through the tool body (66) and a barrier (74) located at an outer surface (90) of the tool (66), wherein the barrier (74) is actuatable to control fluid flow passing the tool (66) and selectively divert fluid flow through the flow path (paragraph 19).

The subject-matter of claim 1 is therefore not new contrary to the provisions of Article 33(2) PCT.

- V-2 Furthermore, D1 discloses the additional subject-matter of the following dependent claims:

Claim 2: see paragraph 19, lines 4-6.
Claims 3-5: see paragraph 19, lines 9-10.
Claim 10-13: see fig. 3b, screen 80.

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The subject-matter of said claims is therefore not new (Article 33(2) PCT).

V-3 The combination of the features of either of dependent claims 6 and 7 is neither known from, nor rendered obvious by, the available prior art which only shows resilient members which shape are changeable due to the influence of a second substance and not due to the composition of the resilient member it self. See for instance D2, item 44, where a membrane is inflated by means of fluid. Said claims therefore involve an inventive step according to Article 33(3) PCT.

V-4 The subject-matter of dependent claims 8 and 9 relate only to normal design possibilities such that no inventive step is involved in the solution of the related underlying problems of said claims (Article 33(3) PCT). It is very well know to the skilled man in the industry to utilise ball valves, including balls which are dropped to land on a seat in a downhole tool.

V-5 Independent tool claim 14 relate effectively to the same subject-matter as claim 1. Claim 14 does therefore also not meet the requirements of Article 33(2) PCT.

V-6 Furthermore, D1 discloses the additional subject-matter of the following claims dependent upon claim 14:

Claim 15: see fig. 3b, item 80.

Claim 16: see fig. 1e, item 25.

The subject-matter of said claims is therefore not new (Article 33(2) PCT).

V-7 The subject-matter of dependent claims 17 and 18 relate only to normal design possibilities such that no inventive step is involved in the solution of the related underlying problems of said claims (Article 33(3) PCT). See for instance D2, fig. 5, item 44.

V-8 Independent method claim 20 relates effectively to the same subject-matter as independent claim 1 and does therefore also not meets the requirements of Article 33(2) PCT.

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V-9 What has been said about the previous dependent tool claims 10-13 applies, mutatis mutandis, also to dependent method claims 21-23. The subject-matter of said claims is therefore also not new (Article 33(2) PCT).

V-10 Furthermore, the following deficiencies are pointed out:

- The independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
- The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1, D2 is not mentioned in the description, nor are these documents identified therein.
- To satisfy the conciseness requirement of Article 6 PCT, the present set of claims should include only the minimum necessary number of independent claims in any one category. Said requirement is not satisfied by independent claims 1 and 14, as in the present case, it is considered appropriate to use only one independent claim in any one category.